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# **visitor communication plan**

# **Lewis & Clark Caverns state park**

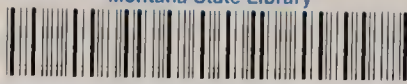
Recreation and Parks Division  
MONTANA DEPARTMENT OF FISH AND GAME  
Helena, Montana

Prepared by:  
ExhibiGraphics Group, Salt Lake City, Utah

February 15, 1977

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# **Introduction**

## **Scope of Work**

Tucked away in a draw high up on a precipitous mountainside overlooking the Jefferson River Canyon, the unobtrusive entrance to Lewis and Clark Caverns masks the extent, beauty and variety of one of Montana's most significant natural attractions.

For centuries, the mountain's labyrinth of caverns, passages and rooms, filled with fantastic water-created forms, was little known to man, even though they lay less than two miles from one of the major corridors of exploration and transportation in the far west. Prehistoric Indians no doubt knew of the caverns, but no evidence exists to indicate that they penetrated into the darkened passages leading sharply downward from the cave's natural entrance. Lewis and Clark passed along the river below the caverns in 1805 and 1806, but were not aware of the cave. In the decades that followed, countless fur trappers, miners, emigrants and railroad builders made their way up and down the river, heedless of the natural wonder that lay so close at hand.





Official "discovery" of the cave did not occur until the later years of the 19th Century, when settlers and ranchers in the area discovered the entrance and cautiously lowered themselves into the cavern's recesses. By the early 1900s, the cave had become widely known and was designated as a national monument in 1907. Primitive guided tours were conducted from that time, but not until the Civilian Conservation Corps built roads, trails, and other visitor facilities in the 1930s did the natural wonders of Lewis and Clark Caverns become generally available to the public on a large scale.

In 1937 the area was deeded to the State of Montana, and development since that time has been accomplished largely by state agencies. Today, more than 70,000 visitors go through the caverns annually, utilizing modern walkways and attractive lighting, and assisted by informed guides who interpret the cave's origins, speleothems, life forms and history.

The caverns themselves are part of a 2,800 acre state park that protects and preserves the larger setting and provides opportunities for other types of recreation activities. A 3-mile long entrance road offers spectacular vistas, and facilities have been provided for camping, picnicking and hiking.

#### Purpose and Scope of Work

As a part of its on-going program of park development and enhancement, the Montana Department of Fish and Game contracted with ExhibiGraphics Group for the preparation of a Visitor Communication Prospectus that would review and analyze the park's interpretive resources and make overall recommendations for an organized and unified approach to park interpretation and communication with visitors. The prospectus, represented by this document, establishes a broad foundation for an integrated approach to visitor communication, coordinating the locations of interpretive components, the subject matter to be communicated, and the media utilized to communicate with visitors.

While this prospectus establishes the general location of interpretive exhibits and visitor communication media, as well as visitor flow and subject matter sequence in the park, its recommendations as to precise location and exact form of completed exhibits and media are conceptual only. The prospectus and its accompanying preliminary design drawings are intended to provide guidance and criteria to designers and fabricators in the preparation of final designs and specifications prior to actual production and installation of exhibits and other interpretive media. Recommendations on communication activities by park personnel or guides will also require additional thought and clarification of program details.



The recommendations contained in the report should not be construed as representing either the approval or disapproval of the Montana Department of Fish and Game. The purpose of this report is to provide a proposal for further consideration by appropriate administrators and individuals who direct visitor use development for Lewis and Clark Caverns State Park.



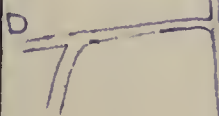
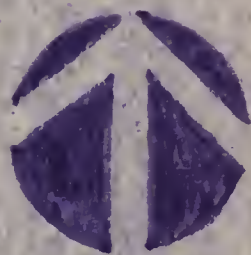


# ne Park

PICNIC AREA  
NATURE TRAIL  
SITE

PIC SITE

RANCE ROAD



INFORMATION  
BUILDING





# The Park







# **Factors Influencing Development**

## Visitors

It is estimated that 60,000 to 80,000 people visit Lewis and Clark Caverns State Park annually, most of them to tour the cave. These visitors largely come during the summer months, with the park itself only open during a 5-month season, from May 1 to September 30. According to park managers and those involved in tour operation, 90,000 visitors is about the maximum annual capacity for the cave, given the limited season, minimum times between tours, number of full time and seasonal staff, and related factors. Of course, visitation is lightest during May and September, and some expansion of visitation could be handled during these months.



Extension of the season beyond 5 months does not appear to be practicable, due to general climatic conditions. Snow may still be present in the park as late as May 1, and may fall before the September 30 closing. During occasional years with open autumns, visitor use is theoretically possible into late October or November, but such use cannot be predicted. For all practical purposes, the cave cannot be operated beyond September 30.

Other than numbers of visitors, very little is known about visitor characteristics, except for data developed in a 1975 master's thesis by Daniel P. Vincent, former park manager at Lewis and Clark Caverns. The manuscript examines visitor interest, satisfactions, opinions and preferences regarding mode of transportation to and from the caverns and interpretive methods employed on cavern tours. A total of 1,252 adult visitors during the 1974 season were surveyed, with follow-up surveys in 1975 and 1976, the following conclusions being drawn from the data collected:

1. The majority of the respondents enjoyed the walk to the caverns entrance. During the three years for which survey results are available, from 80 to 85% of respondents enjoyed the walk.
2. The earlier cable car lift conveyance used to transport visitors to the cave entrance until 1973 was preferred by some visitors, but largely by those who had ridden the cable car lift on a previous visit. First time visitors, without previous experience on the lift, preferred walking over the idea of a tram or lift. (Operation of the lift was discontinued in 1973 because of safety considerations. Reconstructing the lift has been determined to be prohibitably expensive, and there are no plans to do so.
3. Visitors appeared to prefer walking to the caverns entrance unaccompanied by a guide. (Both approaches were tried and studied.)
4. The only conditions when walking was undesirable to visitors were during hot periods of the day and during inclement weather.
5. Visitors were generally satisfied with the present length of time on the guided tours.
6. Guided tours were generally preferred to self-guiding tours.
7. Visitor interest in tour information increased dramatically as the amount of scientific, factual and especially historical information was presented, as contrasted with fantasy/imaginary interpretive approaches. Visitors also indicated a desire for presentation of additional factual material.
8. 1976 survey questions about visitor response to the newly-installed interpretive signing along the cavern trail indicate that these devices were utilized by a majority of visitors.





Some 45% of all respondents read all of the signs, and another 26% reported reading some of the signs. Only 2% had not read any, and 6% made no response to the question.

The 1974 survey of visitor preferences and opinions resulted in several changes of tour format at the caverns, including improvement and resurfacing of the old CCC trail to the caverns entrance and emphasis on factual and historic information tours. These changes appear to have met with visitor approval, as evidenced in later surveys by fewer negative responses to questions regarding tour content and format, trailside interpretation, etc.

### Physical Facilities and Setting

With a history of development going back more than 40 years, Lewis and Clark Caverns State Park is highly developed in comparison with many other state parks. Park developments are clustered along a three-mile long access and circulation corridor, extending from U.S. Highway 10 to the Visitor Center/Parking Area complex. Most of the basic park infrastructure dates from the mid-1930s, when CCC crews built the access road, constructed the visitor center building, developed trails to and within the caverns, and improved a few camping areas along the access road. This core circulation facilities system is the major determinant in park master planning, and significant deviations from existing access and circulation patterns cannot be achieved without disturbing the park environment to a high degree. Although it was originally developed to handle visitor patterns of an earlier era, it still seems to provide the most logical means of getting visitors to and from the caverns and other park facilities, given the park's terrain and physical characteristics.

Post-CCC development in the park includes the Information Building, constructed during the 1950s, at the junction of the access road with U.S. Highway 10, and a new campground, opened in 1970 in the area near the park entrance just west of the Information Building. A maintenance building is located adjacent to the access road, as are two small CCC-developed campgrounds that now serve day use functions only. A privately-operated concession building is situated on the south side of the Visitor Center/Parking Area complex, and provides food service and souvenir sales.

The original CCC trail to and from the caverns was used until 1947, when a 1/2-mile motorized railroad and inclined cable car tram were put in service. This made it possible for visitors to travel to and from the caverns with a minimum of physical effort, and the tram was a popular feature during its existence. However, by the early 1970s the railroad and tram service was discontinued for safety reasons. The old CCC trail was improved and paved, and now serves as the means of visitor access to the caverns. Subsequent study of the feasibility of refurbishing the tram system has shown it to be prohibitive from a cost point of view, and the 1974 survey of visitor preferences indicated that most visitors preferred the walk anyway.



The park provides a combination of motorized and pedestrian experiences. While pedestrian traffic influences interpretive presentation in the park's major visitor area -- the visitor center and the caverns -- visitors experience almost all of the remainder of the park from their automobiles. While there is potential for pedestrian interpretive activities elsewhere in the park, most interpretation and communication in these areas must be oriented to a vehicular situation.

### Interpretive Resources

Lewis and Clark Caverns State Park exhibits a variety of inherent interpretive resources, the most striking and unusual of which are the caverns themselves. The caverns are, of course, the raison d'etre for the park, and exhibit a rich variety of speleothems and evidences of the processes that created the caverns and continue to work in them. These constitute the park's most significant store of interpretive resources.

The caverns are in effect a gigantic natural laboratory in which visitors can learn by first-hand observation the processes that created them and are now festooning them with stalactites, stalagmites, flowstone, draperies, and myriad other forms. In addition, the caverns offer an opportunity to help visitors understand the role of light in the life processes, and how living organisms have been able to adapt to the dark in creating unique ecosystems of closely inter-dependent plant and animal life.

The state park's 2,800 acres encompass a sizable portion of the caverns' larger setting, with potential for interpretation of larger geologic processes. The canyons and ridges of the park also exhibit a wide variety of plant and animal life, with representative habitats and species for natural communities typical of the semi-arid mountain ranges that form the eastern slopes of the Continental Divide. The basic sagebrush and mixed conifer communities found generally throughout the park are intermixed with lush riparian communities where perennial streams flow down the canyons. In addition, the park provides a good opportunity for communication of broader environmental concepts, ranging from the effects of microclimate to food chains to the territoriality of species to the effects of man on the environment.

While significant state or regional historical events did not occur within the core area of the park, it is adjacent to the major historical corridor of the Jefferson River, utilized by Lewis and Clark on their journey of exploration to the Pacific in 1805-06, as well as later fur trappers and the first





northern transcontinental railroad lines and highways. The caverns themselves, while not widely known until the late 1800s, have a significant local history of their own, including the history of CCC operations in and near the park during the 1930s.

While a detailed interpretive resources inventory is beyond the scope of this report, a basic conceptual framework for organization of interpretive concepts is included herein and presented as a part of the program recommendations that follow. The conceptual framework should serve as the basis for an on-going interpretive resources inventory program, with files developed on each theme, subtheme and topic as an aid and reference source for park interpreters and for the future design and production of interpretive media.

### Management Considerations

As with almost any agency of government, funding realities will serve as a major constraint to interpretive development at Lewis and Clark Caverns State Park. The proposed interpretive program must of necessity reflect media and presentation approaches that make the best possible use of existing facilities and locations, requiring minimal site or building development. Priorities should reflect the relative importance of interpretive components in the total context of the visitor experience, with the most needed components being developed first and less important components being left to a later time.

Personnel limitation, both those imposed by budgets and those inherent in a remote location, also influence the direction of the interpretive program. Except for the interior of the caverns, where tour guides are needed both for psychological reasons as well as for protection of the cave, interpretive presentations and media must largely be available to visitors on a self-service basis.





# **Program Recommendations**



# Objectives

## Prime Objective

The primary objective of the visitor communication program at Lewis and Clark Caverns State Park is to develop means of communicating with park visitors in ways that effectively provide them with necessary information about facilities, experiences and services available in the park; that motivate them to participate in various aspects of the visitor experience; and that enrich and enhance the quality of their visits by providing greater understanding of the resources and processes they are experiencing in the park.

Related to the accomplishment of this primary objective are several overall secondary objectives, delineated under four basic categories:

- Motivational (what visitors should do)
- Educational (what they should learn)
- Emotional (how they should feel)
- Other (goals related to agency management, etc.)



The objectives delineated have been ranked as (A), (B), or (C), depending on their relative importance in the overall visitor communication program.

### Motivational Objectives

As a result of interacting with the park visitor communication program, visitors should:

1. Be able to find their way to various park facilities and visitor experiences, and be motivated to do so. (A)
2. Respect and protect the park's natural, scenic and cultural resources, enjoying their visit without resort to vandalism, littering or other detrimental activities. (A)
3. Be motivated to learn more about the natural processes and phenomena they have seen and experienced during their visit. (B)

### Educational Objectives

After experiencing the park's resources and having them interpreted through various communication media, visitors should:

1. Have a basic understanding of the events and processes that created the caverns and are still at work in them. (A)
2. Be able to identify the major types of speleothems and understand some of the basic differences in their appearance and the ways they were formed. (B)
3. Understand the broad characteristics of the overall park environment and the factors that make this particular environment the way it is. (C)
4. Have a general understanding of the history of cave, park and region. (B)
5. Understand the true relationship of Lewis and Clark to the caverns, including the realization that they did not discover them. (C)





### Emotional Objectives

The emotions provide powerful assistance in effective communication, and can also create barriers to communication. During their visit to Lewis and Clark Caverns State Park, visitors should:

1. Feel welcome and at home in the park. (A)
2. Feel free of anxiety about their safety and comfort during the cavern experience, but at the same time have an awareness of potential dangers in the cave. (A)
3. Have a feeling of well-being, enjoyment and personal satisfaction. (A)
4. Have a heightened awareness of and appreciation for the delicacy and fragility of the speleothems and the need to avoid touching or damaging them. (A)
5. Recognize and appreciate man's relationship and kinship to the natural environment, and his potential for effects on the environment, both inside the cave and out. (B)
6. Have a positive feeling about the role of the Montana Department of Fish and Game's management activities and programs in the park. (C)
7. Feel a sense of adventure and discovery while exploring the caverns and the surrounding area.

### Other Goals

1. Visitors should come away with an awareness that the caverns and park are part of the public heritage, managed for the public benefit by the Recreation and Parks Division of the Montana Department of Fish and Game. (B)
2. Visitors should, as a result of the communication program, be encouraged toward positive activities in the park, rather than inappropriate use of the park's resources and facilities. (B)



# Guidelines

## Facilities:

1. New facilities and structures should harmonize with existing design themes, utilizing similar materials and design that complements major existing structures. This will help avoid a hodge-podge assemblage of buildings, structures and facilities that do not blend. In general, the materials and design themes suggested in the existing CCC structures seem to be more suitable and visually pleasing than those used in some newer structures. Of course, new structures can be modern and utilize up-to-date building methods, but they can still have a visual kinship to the older structures.



2. New facilities should, as a rule, not be developed outside existing development areas or corridors, except in cases of definite need, such as the proposed restroom structure near the cave entrance. The park is small, and much of its overall visual appeal will be lost if man-made visual intrusions are allowed in widespread areas.

#### The Cavern Tour:

1. Visitors should be able to experience a sense of remoteness and freedom from man-made intrusions in the area of the caverns. Part of this feeling is achieved by the existing physical separation of the caverns from the visitor parking/visitor complex and this is enhanced by the physical act of hiking to the cave entrance. Therefore, motorized transport to and from the cave should be avoided except in the case of special tours for the handicapped or others who are physically unable to make the hike.
2. Tours should be limited to 25, the maximum number that can be handled easily in the corridors and rooms of the cavern. If visitor pressures increase, some form of advance ticket sales could be done, selling tickets for tours beginning at specific times, with the tickets honored only on the tour for which they were issued. Ticket sales for a particular tour would be discontinued when the tour was full or at a time that would still allow people to make the hike to the entrance. Such an approach seems preferable to having larger tours or spacing them more closely, both of which tend to lower the quality of the visitor experience in the caverns, especially those aspects related to personal "discovery" of the cave. Simply stated, the caverns have a maximum carrying capacity, beyond which both visitor experience and the cave environment may be degraded.
3. No signs or interpretive devices should be placed inside the caverns, other than those proposed for the entrance waiting area. This will preserve the essential natural feeling of the cave, enhance the feeling of discovery by visitors, and minimize the visual effect of man's intrusion in the cave environment.
4. Interpretation of the caverns by tour guides should be aimed at instilling a respect for and appreciation of the natural processes at work in the cave. While this does not preclude the use of humor by tour guides, humor should not be





allowed to detract from the almost "spiritual" impact that the cavern experience can have on visitors. Ideally, the tours should be tailored to the needs of each individual group, i.e., young children, older students, tourists, etc. The greatest impact on visitors will occur when they feel as if they are personally participating in discovering the secrets of the cave themselves.

5. The caverns should be interpreted as essentially a natural phenomenon, avoiding overuse of fantasy or imaginary approaches to description. The caverns and their formations have enough "wonder" in their own right.
6. The caverns should be allowed to stand on their own, without resort to superlatives or needless comparisons with other caves. Each cave is a unique natural creation and has a personality of its own. Lewis and Clark Caverns are no exceptions to this rule.
7. Each guide should be factually well informed on other caves so questions can be answered intelligently.

#### Interpretive Media and Presentation

1. Exhibits and interpretive media should allow for flexibility and ease in updating, as new facilities and programs are developed and others are phased out.
2. Visitors should be allowed to touch broken speleothems or other materials removed from the cave, in order to "get it out of their system" before entering. Visitors should be made aware of the fragile nature of the speleothems and the need to avoid unwitting damage to the cavern environment.
3. Exhibits and interpretive media should be contemporary and clean in design appearance, utilizing basic good design taste and avoiding faddish design, typography, illustration styles or graphics that may appear out-of-date in a short time.
4. The design theme for all exhibits, signing and literature formats for the park should be consistent. All such materials and media should relate to one another visually and graphically.
5. Insofar as is possible within budget limitations and visitors numbers, exhibits and interpretive media should invite visitor participation and involvement, making the visitor a participant in the park experience rather than merely an observer.



6. Interpretive exhibits should, wherever possible, be designed in such a way as to avoid the "flat panel" effect, utilizing dimension, color, lighting, sound, motion and other means to convey and communicate their messages.
7. Wherever possible, actual "things" should be used to lend authenticity to the visitor experience and heighten communication of concepts. Use of historical artifacts, natural objects and actual items of equipment can often provide a simple yet inexpensive and relatively maintenance-free way to provoke visitor interest and provide visual impact to the exhibits. Combined with judicious use of audio-visual or audio devices, such objects can be powerful and effective communication media.
8. Except in the case of valuable, delicate or irreplaceable items, artifacts and objects should be displayed without the use of glass or other unnecessary barriers between viewer and object. Where possible, visitors should be allowed and encouraged to touch and feel objects.
9. The interpretive media should be designed to be integral with their setting. Outdoor exhibits should harmonize with and be a part of the existing landscape design and structures rather than looking like an "add-on." Indoor exhibits should harmonize with the architecture of the buildings and should be designed in context with the overall interior design of the buildings.
10. Information presented in exhibits and interpretive media should be concise, simple and straight-forward. Simplicity of concept and in means of communication should guide all design and layout decisions. No attempt should be made to overwhelm visitors with a "textbook on a wall" approach, too often used in museums or interpretive exhibits in the past. Casual visitors should be able to understand the concepts being communicated without having to read every text or look at every element. At the same time, the subject matter should be covered in sufficient depth to satisfy the visitor who has more than casual interest.
11. Audio-visual techniques should not be overdone, but utilized to communicate narrative sequences or other concepts especially suited to audio-visual media. Such media should not be used to communicate abstract or complex ideas that require visitors to refer back mentally to material already presented. Length of A/V productions should be strictly limited to the minimum time necessary to communicate the material. Visitors will not generally endure a presentation lasting more than two or three minutes, except in a sit-down theater situation.





12. Provision should be made for a "mix" of interpretive media to ensure that visitors with visual or hearing handicaps can understand the interpretive presentation. Where feasible, interpretive signs should include braille messages or relief-lettering.
13. Non-English-speaking visitors should be accommodated by means of park brochures printed in the most common languages encountered, with possible special tours by bilingual guides. Foreign language visitation does not appear to be sufficient to warrant multi-lingual exhibit or sign labels.
14. Maintenance of equipment in a field situation some distances from sources of supply or services must be considered in determining the suitability of such equipment in any specific interpretive situation at Lewis and Clark Caverns State Park. In general, standby equipment should be procured for all A/V or special equipment situations to avoid the problem of non-functioning exhibits when breakdowns occur.
15. All audio or audio-visual materials should be prepared and presented in a professional manner, avoiding "home made" shows or other amateur presentations.
16. Because of limitations on personnel, all non-tour exhibits and interpretive media should be designed for use by visitors on a "self-service" basis, avoiding the need to have park personnel present at all times in order for the interpretive message to communicate.





# Concepts

it

## 4. Route (A)

1. Orientation
2. Overview
3. Safety comfort  
and regulations

ETIVE RESOURCES (B)

(B)

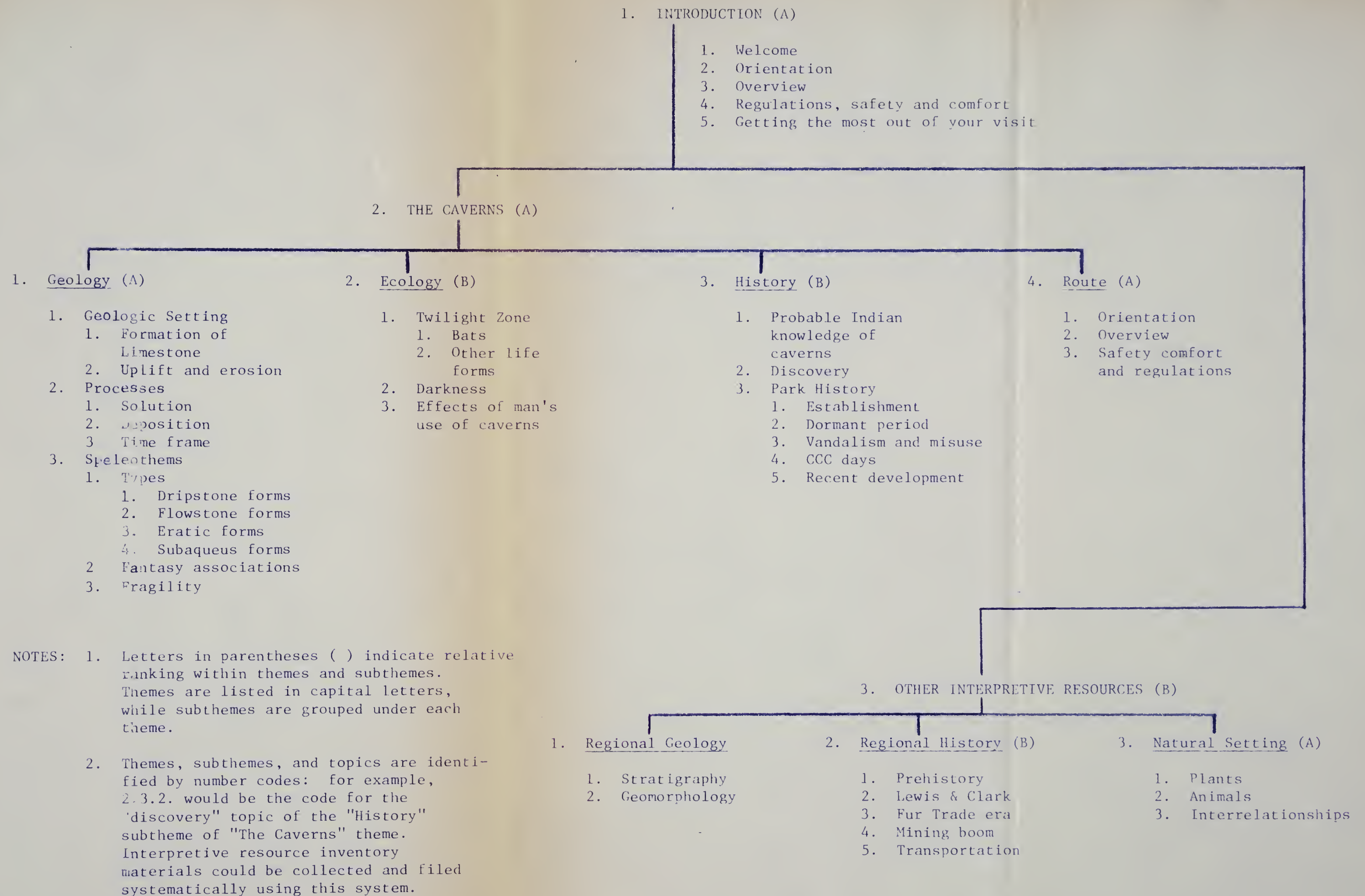
## 3. Natural Setting (A)

1. Plants
2. Animals
3. Interrelationships

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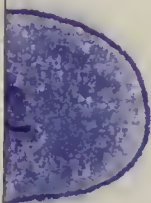


# Concepts





# xperience



## THE NATURE TRAIL

-- Natural Setting



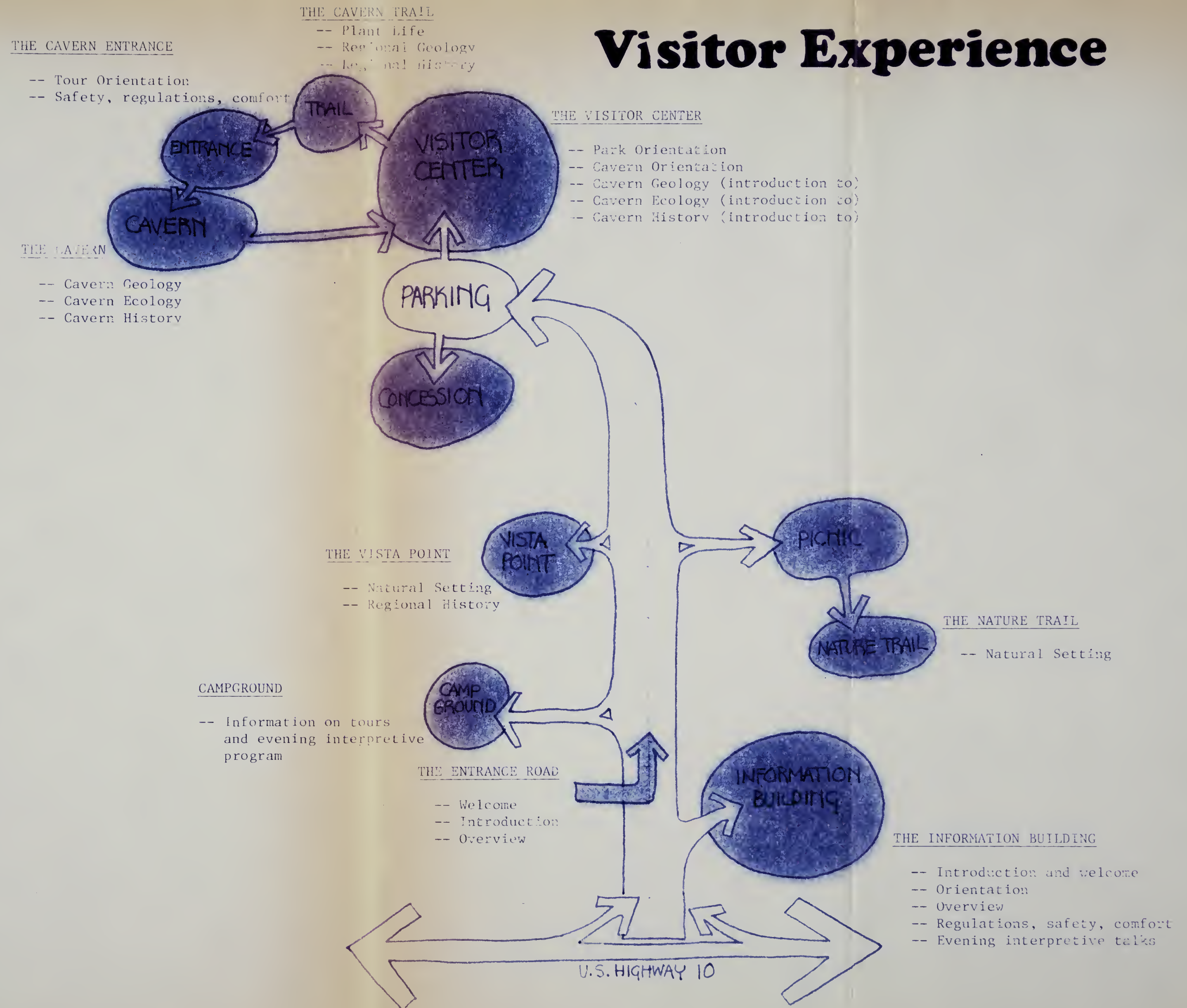
## THE INFORMATION BUILDING

- Introduction and welcome
- Orientation
- Overview
- Regulations, safety, comfort
- Evening interpretive talks





# Visitor Experience





## PRESENTATION OF CONCEPTS BY LOCATION

<u>Major Conceptual Theme</u>	<u>Interpretive Location</u>
1. INTRODUCTION	-- Information Building Exhibits -- Signing Program -- Entrance Road Presentation -- Visitor Center Information Counter -- Vista Point Exhibits
2. THE CAVERNS	-- Caverns Tour -- Cavern Entrance Exhibits -- Visitor Center Interpretive Exhibits -- Campfire Programs at Information Building
3. OTHER INTERPRETIVE RESOURCES	-- Caverns Trail Signs -- Vista Point Exhibits -- Nature Trail -- Campfire Programs at Information Building





# **Program Components**



## THE INFORMATION BUILDING

### Interpretive Objectives:

1. Provide basic information on the location of park facilities and how visitors can reach them.
2. Communicate a preview of the kinds of visitor experiences available in the park, including information on times, costs, length of time required, special tours, etc.
3. Make visitors feel welcome and at home in the park.
4. Provide an initial good impression about the quality of the park and its facilities, and its management by the Montana Department of Fish and Game.
5. Provide an interpretive environment for after-hours use as a location for talks and presentations by park interpreters, primarily for people staying overnight at the nearby park campground.

### Concepts to be Communicated

1. Introduction and welcome.
2. Basic information on the park: what, where, when, how much.
3. Overview of park.
4. Regulations, safety and comfort information.
5. Geology ecology, history, (evening interpretive programs only), etc.

### Interpretive Media;

1. Large map of park, showing location of facilities and visitor use areas.
2. Simple graphic displays depicting the variety and type of visitor experiences offered in the park.



3. Visitor-actuated audio-visual presentation, providing a more detailed overview of the park experience, using photography, music and dramatic narration to motivate and inform visitors. (A/V equipment could also be used for specialized interpretive presentations during evening interpretive programs.)
4. Brochures would provide more detailed orientation information, and would serve as a guide leaflet for visitors to use during their visit: A single park orientation brochure, with map, overview of history and geology, and information on specific visitor use opportunities, would probably be the only brochure needed at this location.
5. Signing along the highway and adjacent to the building would identify the facility as the park Information Center and encourage visitors to stop. Signs and information at the campground would inform visitors of the evening campfire program at the information building.
6. During periods and hours of heaviest visitor use, a uniformed attendant could supplement the self-service media and answer specific visitor inquiries.













THE INFORMATION BUILDING







## THE ENTRANCE ROAD

### Interpretive Objectives:

1. Reach visitors traveling in their automobiles along the entrance road, providing them with a general idea of the park and its facilities and attractions.
2. Give visitors a way to become involved with the park before they leave their cars, heightening anticipation and expectancy, and motivating them to leave their automobiles to experience the park's major attractions on foot.
3. Provide a means for orienting visitors who do not stop at the information building.

### Concepts to be Communicated:

1. Welcome and introduction to park.
2. An overview of the geology, history and ecology of the park, presented in a way that will "tease" visitors and motivate them to involvement in the park's visitor experience.

### Interpretive Media:

1. Low-power radio transmitter, using a frequency not conflicting with local radio stations, received on visitors' car radio.
2. Signing along road to inform visitors about the radio presentation and motivate them to tune it in.



## THE VISITOR CENTER -- INFORMATION PAVILION

### Interpretive Objectives:

1. Provide something interesting and informative for visitors to do while waiting or congregating prior to making hike to caverns.
2. Provide answers to questions and dispense information about cavern tours, other park interpretive and visitor opportunities.
3. Orientation to tour details, such as cost, length of hike, time required, things to see and experience, regulations, etc.
4. Motivate visitors to participate in the tours and other park experiences.

### Concepts to be Communicated:

1. Orientation information about park, with emphasis on caverns and tours.
2. Regulations, safety and comfort information.
3. Information about special tours, photography and clothing to wear.

### Interpretive Media:

1. Manned information counter.
2. Park orientation map.
3. Caverns tour map and graphic material on costs, time, safety and comfort information.
4. Photographic or graphic presentation showing cavern interior, other park recreation opportunities.
5. Existing information pedestal in the plaza area adjacent to the pavilion would be used for notices of coming events, or other changeable, short-term information.







CENTER INFORMATION PAVILION









VISITOR CENTER INFORMATION PAVILION





## VISITOR CENTER -- INTERPRETIVE EXHIBITS

### Interpretive Objectives:

1. Provide something for visitors to do and learn before making the hike to the caverns.
2. Provide a solid introduction to the geology, origins, speleothems and history of the caverns, giving visitors a conceptual underpinning and frame of reference for the concepts they will be exposed to in the cavern tour itself.
3. Provide an interpretive experience for individuals who are unable to take the cavern tour to see the caverns in actuality.
4. Provide opportunity for visitors who have taken the tour to reinforce and clarify the concepts they learned in the cavern.
5. Give visitors an opportunity to touch and feel the speleothems in a controlled environment rather than in the cave.
6. Impress on visitors the importance of not handling speleothems in the caverns, and show examples of the damage that can occur when speleothems are repeatedly handled.

### Concepts to be Communication:

1. Information on the geologic conditions and processes that created Lewis and Clark Caverns, including an understanding of the time involved in such processes.
2. Information on the various speleothems that can be seen in the caverns, including presentation of material on how they were formed, reasons for varying shapes and coloring, and ways to tell the difference between types of speleothems.
3. Information on the fragile nature of cave speleothems, the damaging effects of touching and handling by visitors.





4. Information on cavern ecology, including life forms and interrelationships in the twilight zone as well as total darkness. Included could be material on how man's entry and use of the caverns have introduced subtle changes in the cavern ecology through introduction of light, etc.
5. Material providing an overview of the history of the caverns, including possible discovery, development by CCC crews, modern developments, etc.

Interpretive Media:

1. Graphic and pictorial exhibits covering various aspects of the subject matter.
2. Audio-visual presentation on the geologic processes involved in formation of the cave and its speleothems.
3. Actual examples of the kinds of speleothems present in Lewis and Clark Caverns, salvaged from materials removed from the cave during construction. These should be displayed in the same relative positions as they would naturally occur (hanging, resting on horizontal surface, against wall, etc.)
4. Touch and feel exhibits utilizing salvaged speleothems, including some showing the kinds of damage these formations sustain at the hands of careless visitors.
5. Freeze-dried or taxidermy specimens of cavern life forms, including bats, rats, spiders.





THE VISITOR CENTER







THE VISITOR CENTER





## THE CAVERN TRAIL

### Interpretive Objectives:

1. Provide information that would be of interest to visitors during their walk to the caverns entrance.
2. Utilize certain points along the trail as interpretive rest stops, giving visitors the chance to stop periodically and learn something of the environment they are seeing.

### Concepts to be Communicated:

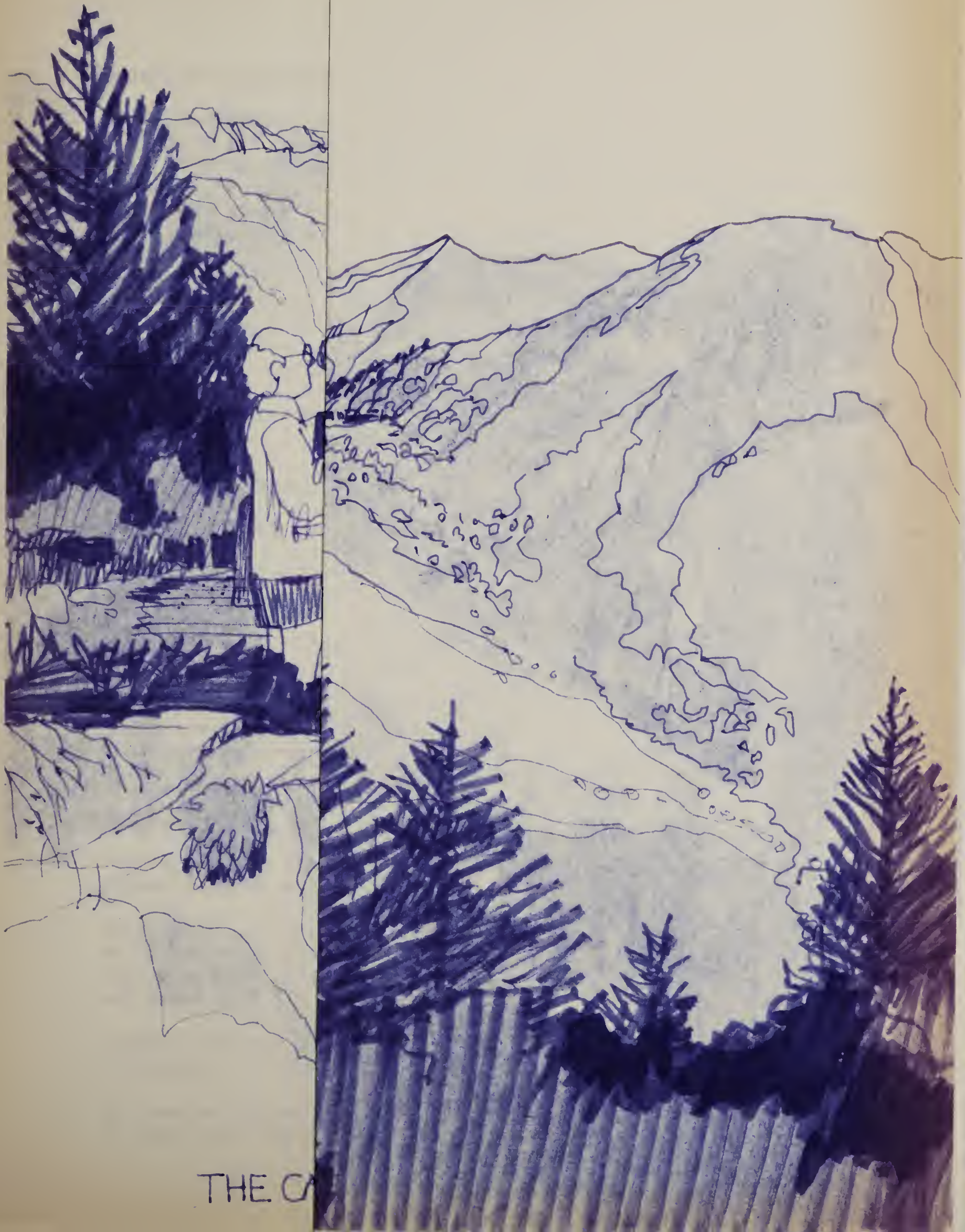
1. Information on fossils present in the rocks, regional geologic history and other aspects of the natural scene that are visible along the trail.
2. Material dealing with the route of the Lewis and Clark expedition (which is visible from the trail), and the lack of any historical connection between the explorers and the caverns.
3. Information relating the historical role of the inclined cable-car tram, interpreting it as a historic feature of the park. (Temporary sign only, used until tram remnants are removed.)
4. Information on plants and evidences of animal life that may be observed along the trail.

### Interpretive Media:

1. Trailside interpretive signs, with illustrations and text material, produced in Permaloy or other weatherproof and vandal resistant material.







THE C









THE CAVERN TRAIL





## CAVERN ENTRANCE EXHIBITS

### Interpretive Objectives:

1. Provide visitors with a general orientation to the spatial layout of the cave, giving them some idea of the route they will be following and the relationship of the various parts of the caverns to each other, the entrance and exit. The model should be done in a way to indicate the location of the outside cliff face as well.
2. Inform visitors as to the time the previous tour left and the time the next tour would likely be departing.
3. Provide visitors with something to do while waiting for the next tour to begin.
4. Provide reinforcement of regulations and safety information.

### Concepts to be Communicated:

1. Time of previous tour and approximate time of next one.
2. Spatial layout and arrangement of the cave, and relationship of tour route to various rooms and passages.
3. Information on park safety regulations.
4. Information on use of cameras and where and how to take satisfactory photographs inside the caverns, including the dangers of "flash-blindness" and the safety hazards of stopping to take photographs in narrow passages.

### Interpretive Media:

1. Display showing time of next tour, with numbers that can be changed by the guide after taking tour group into cavern.
2. Negative space model of the cave, showing interrelationships of rooms, passages, location of man-made tunnels, etc. This should be labeled as to major rooms and features, entrance and exit.
3. Graphic presentation of regulations, safety, comfort and photographic information.
4. Welcome and introduction to tour by guide, and reinforcement of safety information.

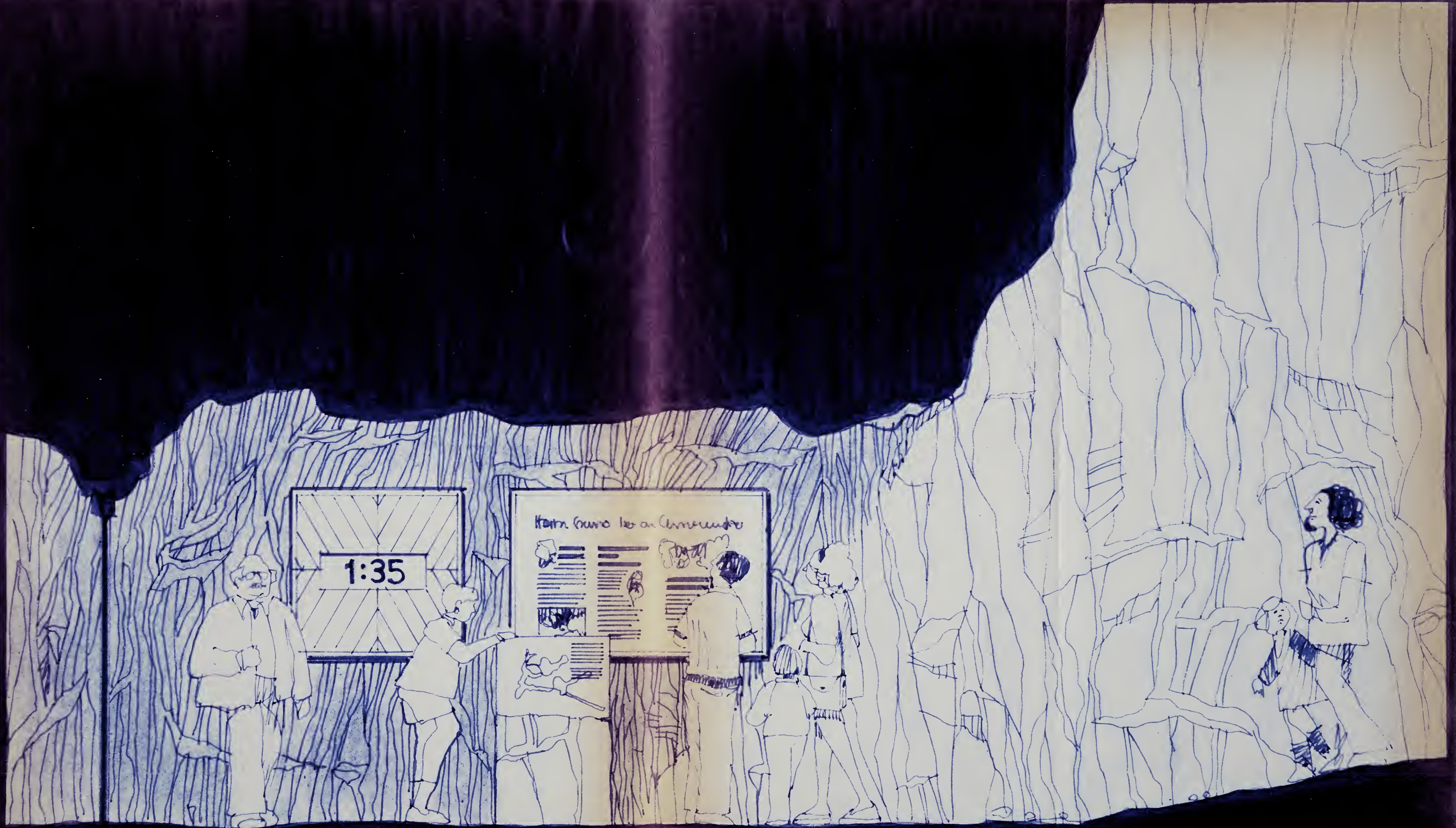
















## THE CAVERNS

### Interpretive Objectives:

1. Provide opportunity for visitors to see and experience the park's major attraction.
2. Create an atmosphere of personal discovery for each tour member as they tour the cave, utilizing personal involvement to provide a more memorable visitor experience.
3. While providing elements of personal discovery in the visitor experience, at the same time provide the psychological reassurance of having an experienced and able guide, so that visitors do not have the feeling of facing the unknown completely by themselves.
4. Help visitors gain an appreciation for the scope and magnitude of the natural processes that created the caverns and speleothems.
5. Provide interpretation suitable to the tour audience, including opportunity for special tour groups, such as geologists, spelunkers, elderly and handicapped, children, etc.
6. Utilize the caverns superb educational potential for environmental education and learning experiences by school groups, scout troops, etc.
7. Communicate, using actual examples in the caverns, an understanding of the various speleothems, including the variety of forms and differences between them.
8. Help visitors gain an appreciation for the biological difficulty and complexity of maintaining life processes in total darkness.

### Concepts to be Communicated:

1. Information on the geologic conditions and processes that created Lewis and Clark Caverns, including an understanding of the time involved in such processes.





2. Information on the various speleothems that can be seen in the caverns, including presentation of material on how they were formed, reasons for varying shapes and coloring, and ways to tell the difference between types of speleothems.
3. Information on the fragile nature of cave speleothems, the damaging effects of touching and handling by visitors.
4. Park regulations regarding handling and vandalism in the caverns.
5. Information on cavern ecology, including life forms and interrelationships in the twilight zone as well as total darkness. Included could be material on how man's entry and use of the caverns have introduced subtle changes in the cavern ecology through introduction of light, etc.
6. Material providing an overview of the history of the caverns, including possible discovery, development by CCC crews, modern developments, etc.
7. The concept of total darkness and the ways plant and animal life in the caverns have adapted to this condition.

#### Interpretive Media:

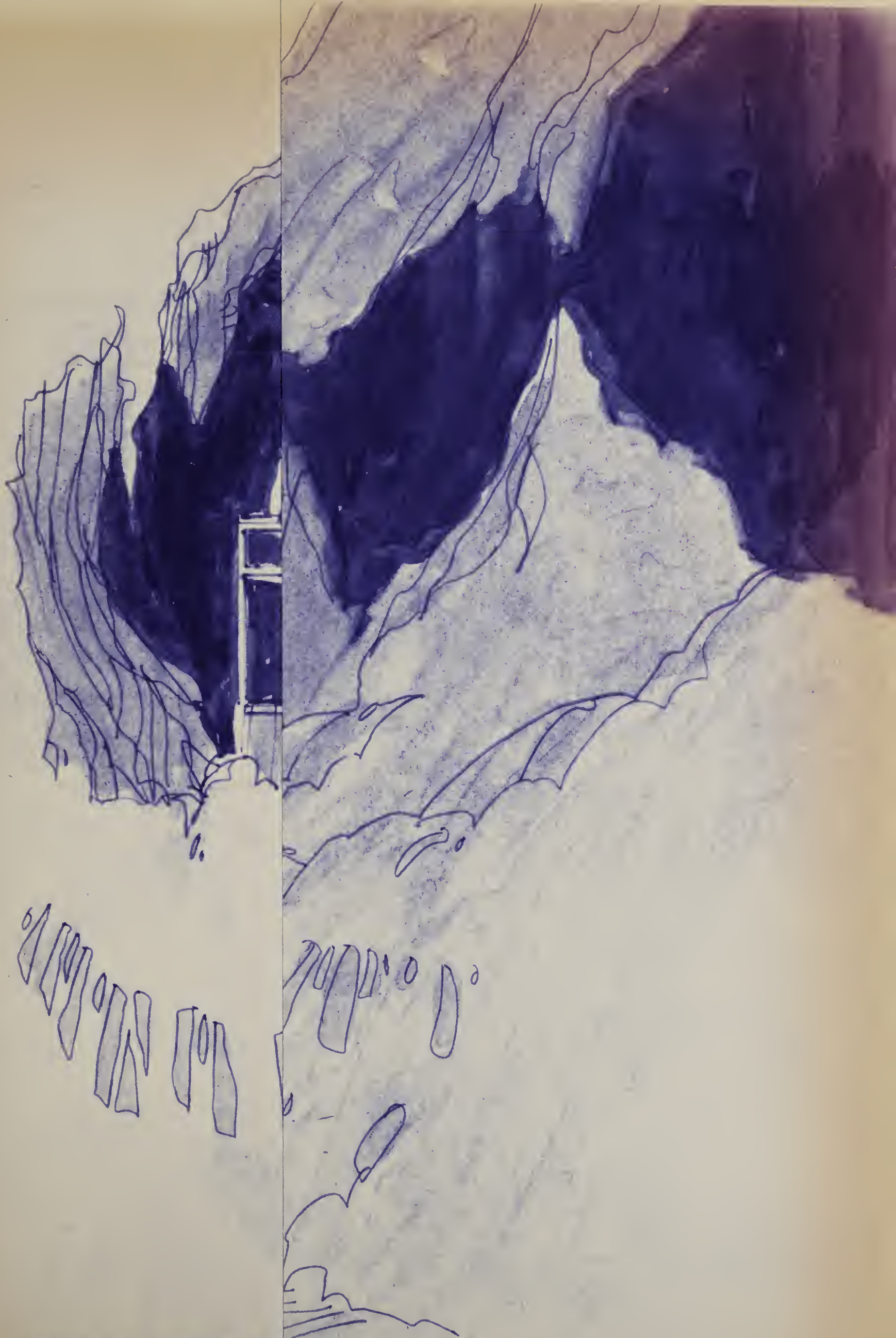
1. Personally guided tour, utilizing basic format used at present, with emphasis on factual and historical material, and with the general tone of the tour modified slightly to provide additional elements of personal and group "discovery" of the cavern. This would mean a slight change of emphasis in presentation to allow for more group involvement rather than just providing description. While humor may still have a place, the emphasis would be subtly changed to help create a less frivolous atmosphere than some tours presently have.
2. Special handicapped and elderly tours utilizing the paradise room only. This would involve reworking some portions of the trail in the room to allow passage of wheelchairs and eliminate steps. Some form of transportation would most likely be needed to move elderly and handicapped visitors to and from the exit tunnel, which would serve as both entrance and exit for these groups.



3. Special interest tours for geologists and cavers, within the limits imposed by cavern ecology and the number of requests for such tours. These would have to be handled on a pre-arranged basis, and could allow for much greater indepth presentation of material and possible "exploration" of portions of the caverns not normally seen by visitors. Such tours would be best scheduled during May and September, when visitor pressures are lessened.
4. Special tours for school groups during May and September. A visit to the caverns could be an important part of environmental education or science classes. Interpretation to children should be different than that done for standard tours, with concepts and presentation tailored to the level of knowledge possessed by the grades that would be utilizing such tours.
5. A cave model located near the exit with major cavern features identified, to visualize where they have been.



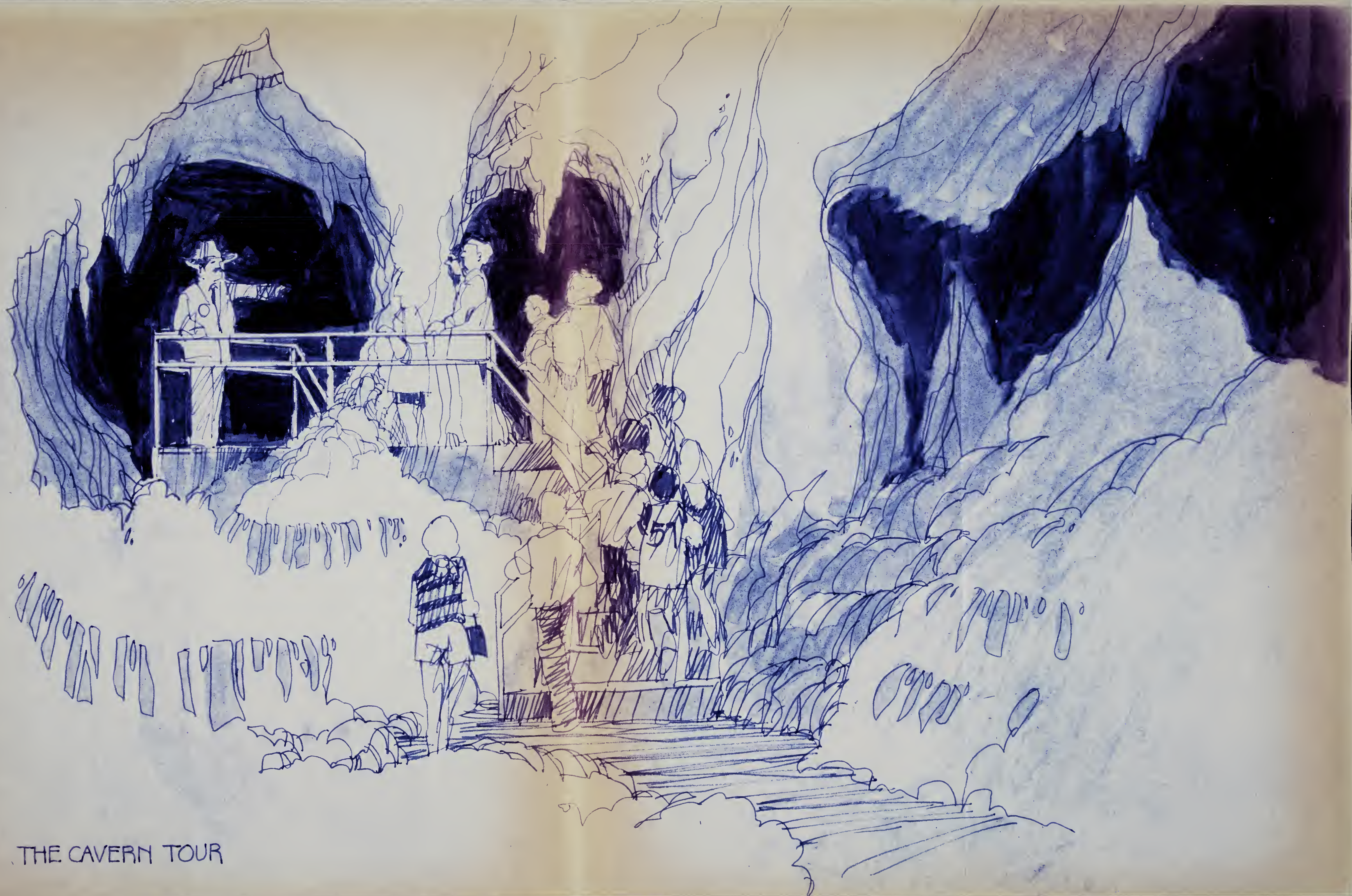




THE CAVERN TO







THE CAVERN TOUR





## THE VISTA POINT

### Interpretive Objectives:

1. Provide an orientation to the view from the point, as well as features of the environment and geology that can be seen from the overlook.

### Concepts to be Communicated:

1. Orientation to view.
2. Information on natural and geologic history, as evidenced from that location.
3. Identification of the park's major natural communities, most of which can be seen from the vista point.

### Interpretive Media:

1. Illustrated graphic overlook signs, mounted along overlook railing or wall, rendered in Permaloy or other weather and vandal-resistant material.



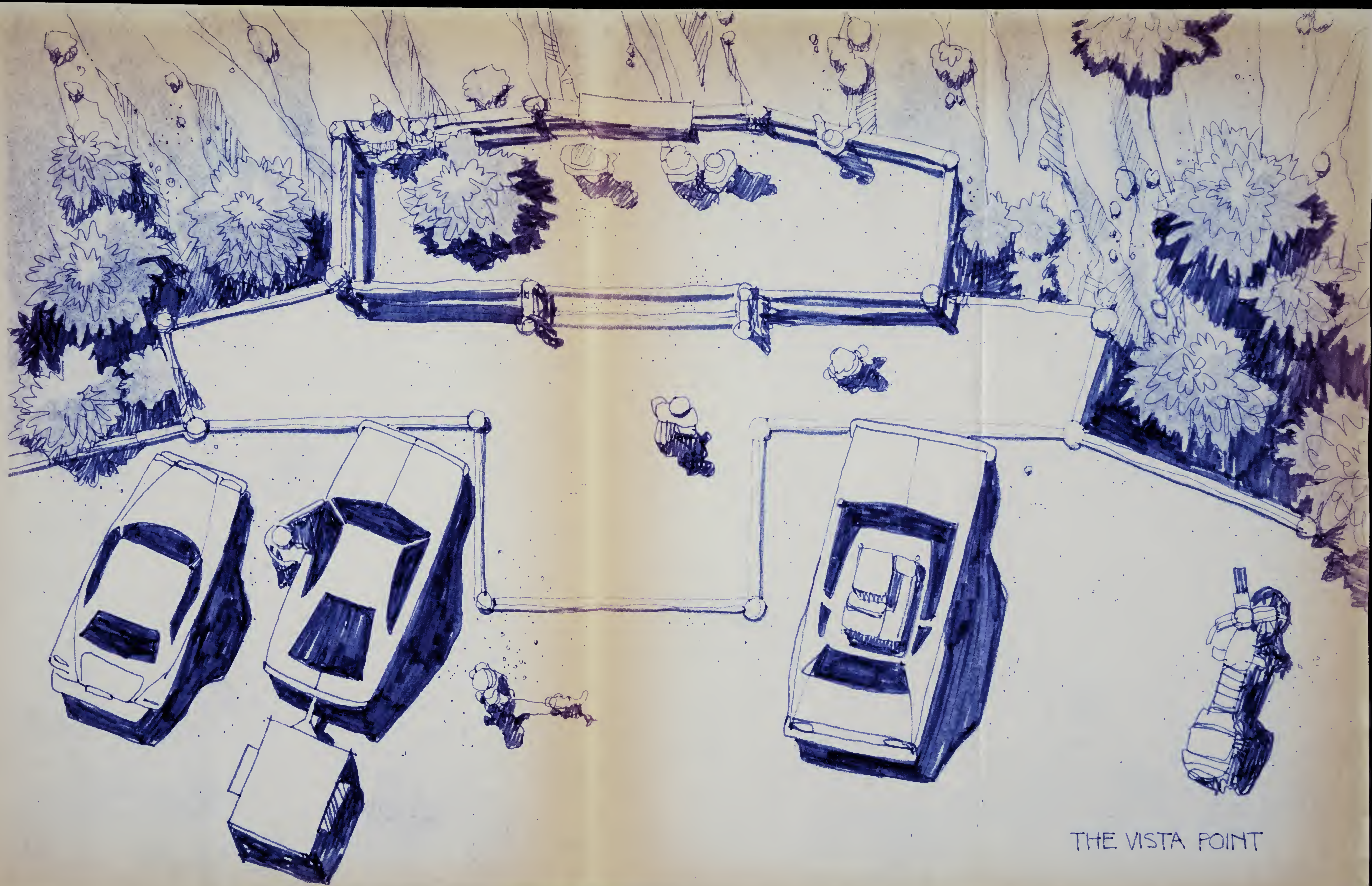




THE VISTA POINT







THE VISTA POINT





## THE NATURE TRAIL

### Interpretive Objectives:

1. To bring visitors into contact with a representative slice of the park environment, helping them understand the interrelationships of living things within typical park natural communities.
2. Instill in visitors a greater appreciation for the natural environment, its life forms, and their relationship to the visitor.
3. Help visitors learn to identify some of the major plant and animal species present in the park environment.

### Concepts to be Communicated:

1. Identification and description of the major natural communities in the nature trail area, with emphasis on interrelationships of living things.
2. Larger ecological concepts illustrated by elements along the nature trail. These could include microclimate, food chains, energy cycles, seasonal rhythms and cycles, etc.
3. Use of plants and animals by prehistoric man to meet his needs of shelter, food, clothing and medicine.
4. The role of forest fires as both a destructive and regenerative force.

### Interpretive Media:

1. Small trailside interpretive signs and markers, with simple illustrations and textual material. These should be done in Permaloy or other weatherproof and vandal-resistant material.
2. Portions or all of the trail should be considered for development for handicapped visitors, including guide ropes or railings and braille or raised lettering. This may not be feasible on trail segments in steeper areas.



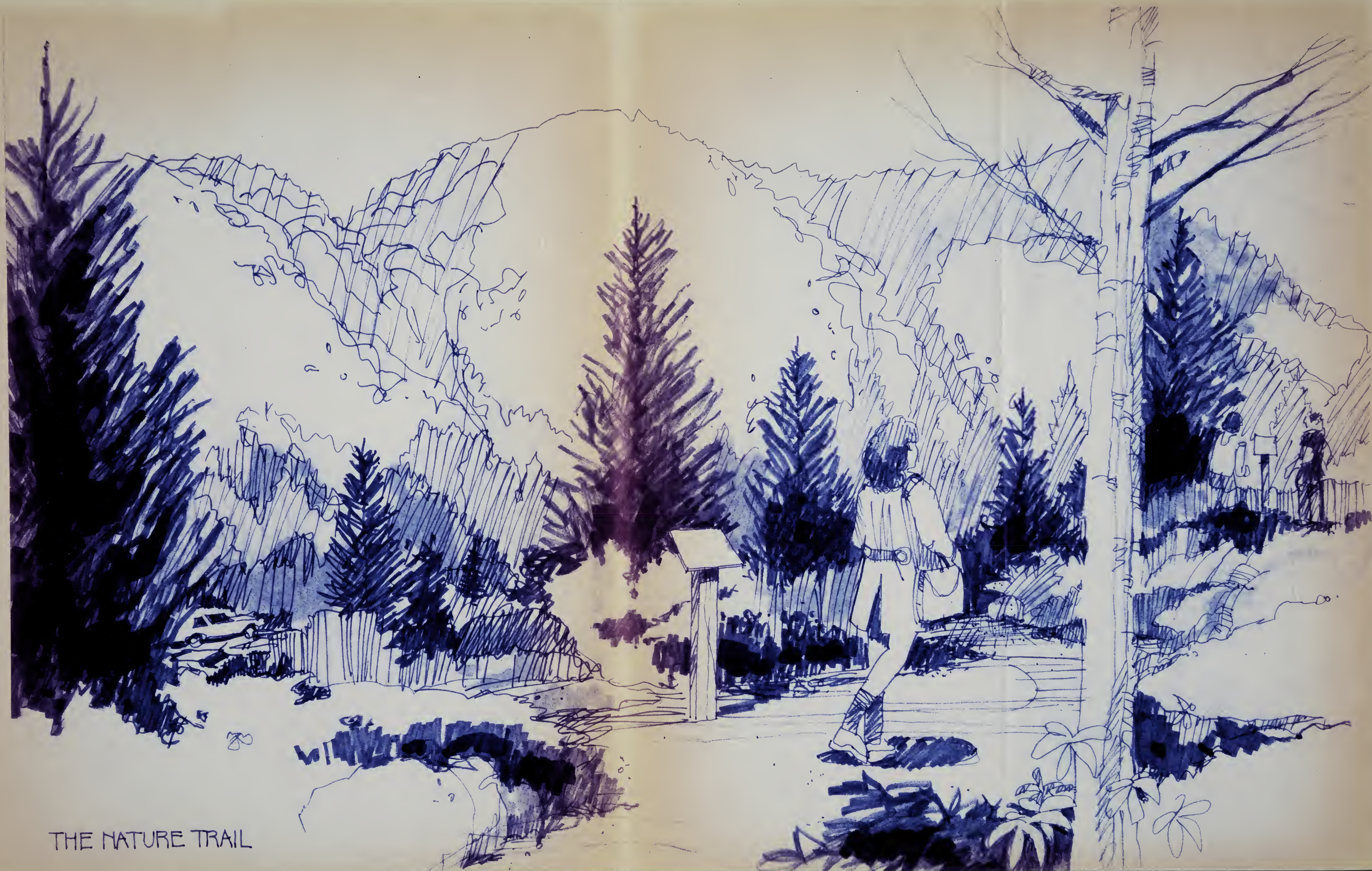




THE NATURE TRAIL







THE NATURE TRAIL





## PEDESTRIAN AND VEHICULAR SIGNING

### Communication Objectives:

1. Provide directions to visitors, enabling them to find their way to various park facilities and visitor use opportunities.
2. Communicate information on regulations, types of visitor use facilities, etc.
3. Provide graphic and visual unity to park development.

### Concepts to be Communicated:

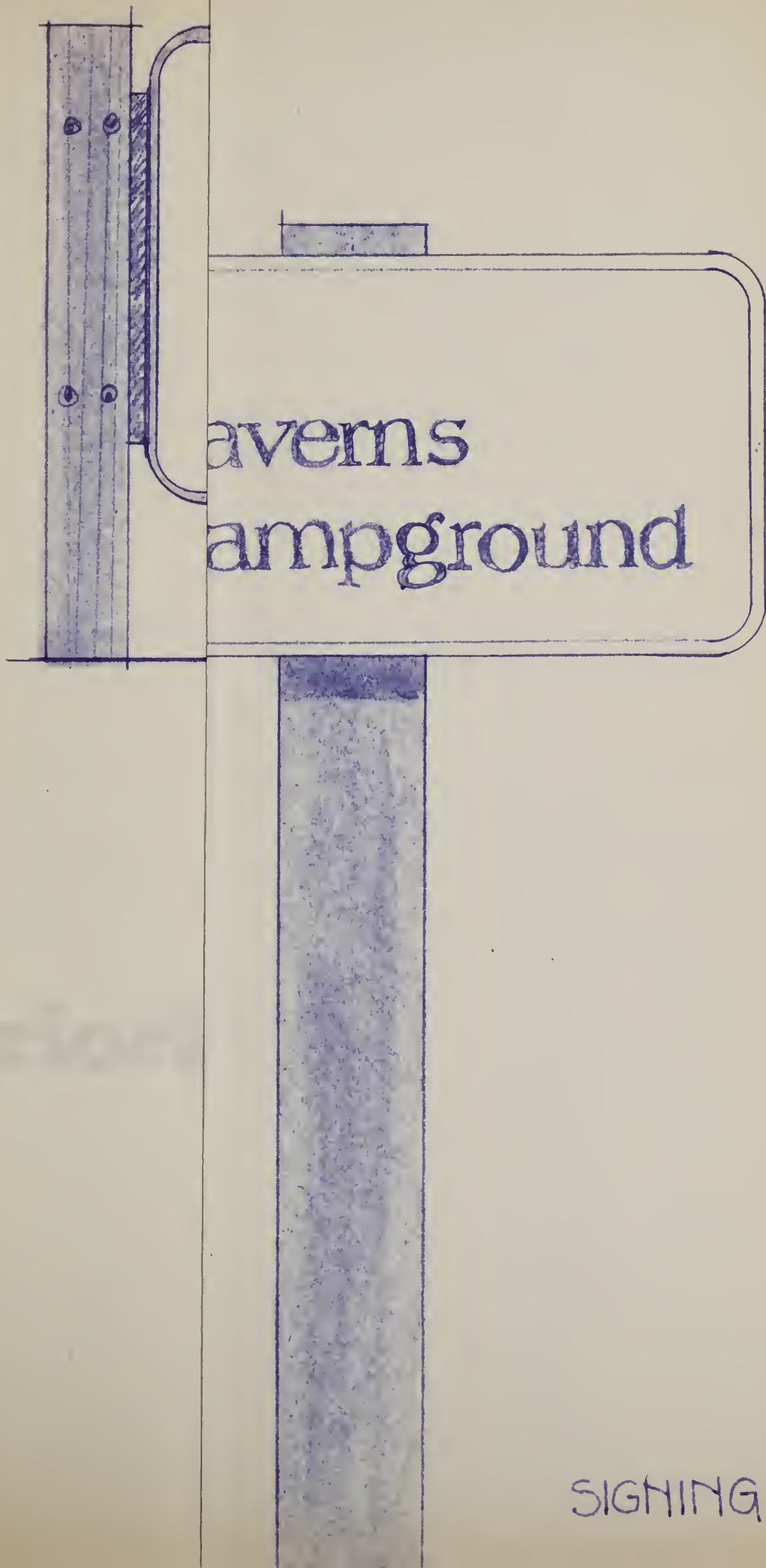
1. Directions and locations.
2. Type and nature of facilities.
3. Regulations, safety and comfort information.
4. Information on the proposed entrance road radio program.

### Interpretive Media:

1. Routed wood signs, stained, for directional and locational signing.
2. Traffic regulatory signing, as specified in the Uniform Manual on Traffic Control Devices.
3. Smaller routed wood signs, stained, for pedestrian directional signing.



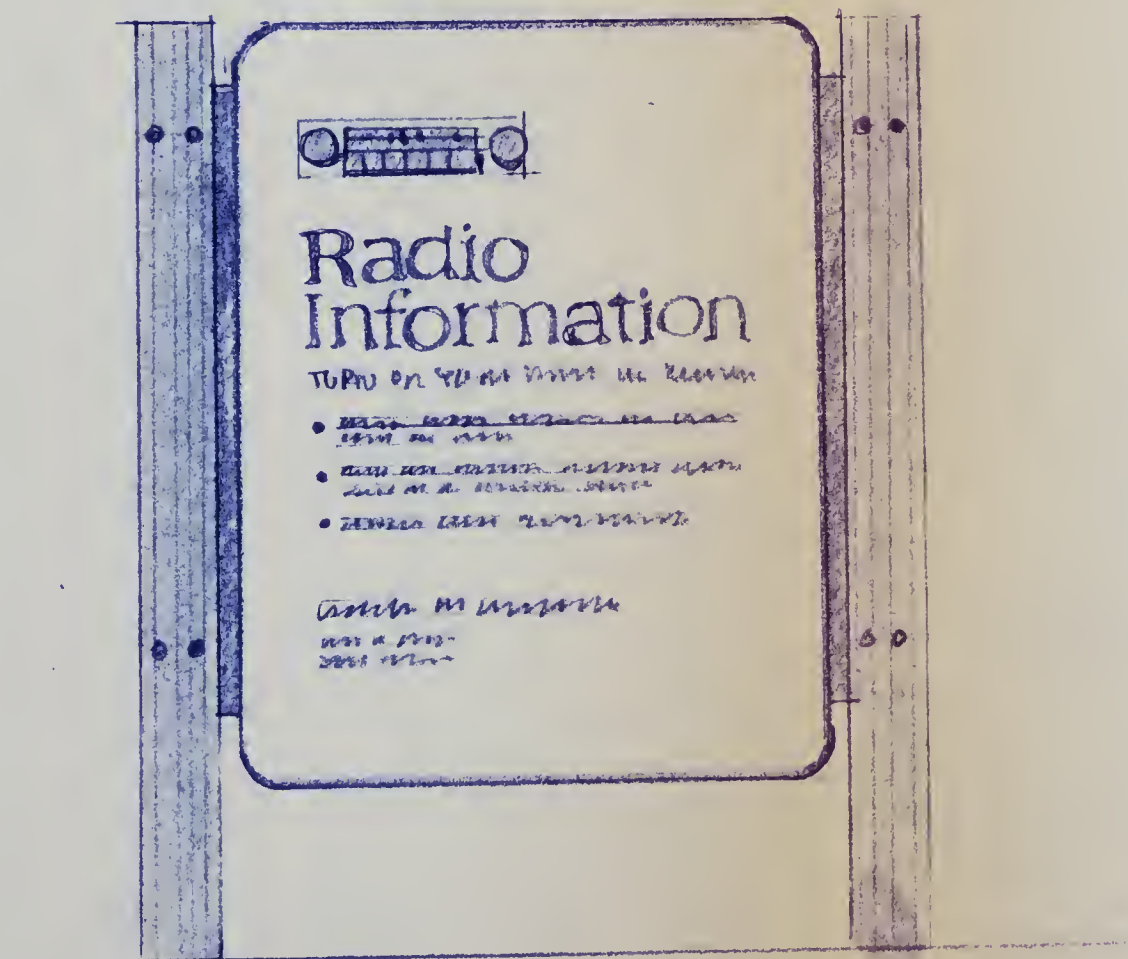
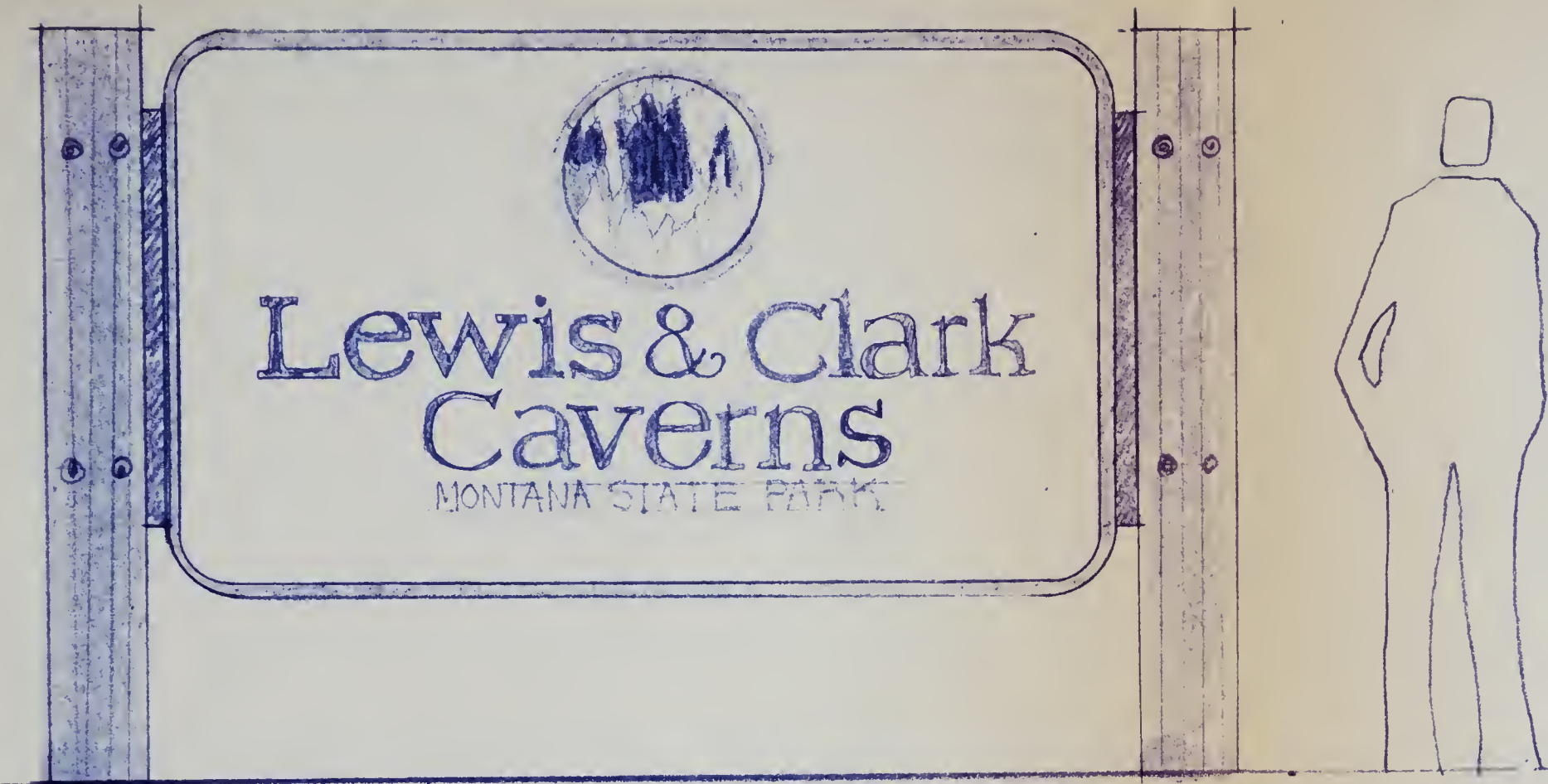




SIGNING







SIGNING



# **Priorities & Costs**





## IMPLEMENTATION PRIORITIES

1. Planning and Design -- actual production and installation of the components of the communication plan should be preceded by planning and design, delineating the exact nature of the interpretive messages and the specific means by which they will be presented. This includes in-depth research into the subject matter to be treated; development of detailed layouts and working drawings for each component; and preparation of texts; schedules of finishes, illustrative material, typography, and artifacts; and specifications for fabrication or production and installation.
2. Visitor Center Interpretive Exhibit Area -- this appears to be most essential in terms of providing a strong conceptual foundation for visitors before beginning their experience in the caverns.
3. Information Building Exhibits and A/V -- just as the visitor center exhibits form the foundation for interpretation at the park, the information building exhibits appear to be the underpinning of all visitor orientation activities.
4. Cavern Trail Interpretive Signs -- the existing signs should be replaced with more permanent signing.
5. Visitor Center Information Pavilion -- the existing bulletin-board structures would seem to handle this adequately until the more extensive orientation media in the pavilion are developed.
6. Cavern Entrance Exhibits -- a helpful and informative addition to the cavern experience, these do not seem as important as some other components.
7. Entrance Road Radio Program -- this is a good supplement to the basic orientation provided by the information building, but would not provide much in the way of new information. Its chief value would lie in reaching those who do not stop at the information building.





8. Nature Trail -- while the nature trail interpretation would expand the interpretive program beyond the caverns to include the broader environment, it seems more important to get the caverns interpretive program developed before turning to this. However, since the cost of developing the nature trail is not great, it might be advanced in priority if funds were available.
9. Vista Point Overlook Exhibits -- Since its implementation will be dependent on physical redevelopment of the parking area and construction of an overlook, it is ranked last. Subject matter presented here is touched upon elsewhere, so these exhibits, while providing an additional reason to stop and experience the park, do not seem to be as essential as other components in the program.



## PRELIMINARY COST ESTIMATES

Note: Costs shown represent approximate market rates as of 1/1/77, based on the rough concept sketches shown in this prospectus.

### FINAL PLANNING AND DESIGN:

Including all drawings, schedules, texts, illustrative material and artifact selections, and specifications needed to produce and install the following components:

-- Information Center interpretive media	\$ 1,100.00	
-- Entrance road radio script	200.00	
-- Visitor Center information pavilion exhibits	1,600.00	
-- Visitor Center Exhibits	4,600.00	
-- Cavern Trail sign layouts and texts	625.00	
-- Cavern Entrance exhibits	850.00	
-- Vista Point Overlook panel layouts and texts	400.00	
-- Nature Trail planning, sign layouts and texts	<u>2,200.00</u>	
		\$11,575.00

### DEVELOPMENT OF PROGRAM COMPONENTS:

#### THE INFORMATION BUILDING

-- Removal of existing exhibits, refinishing of walls, maps, exhibits, audio-visual presentation area and equipment.	<u>\$ 4,700.00</u>	\$ 4,700.00
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#### ENTRANCE ROAD RADIO PROGRAM

-- Recorder/Repeater system, transmitter package	\$ 3,900.00	
-- Program development production, 3 minutes	<u>600.00</u>	
		\$ 4,500.00

#### VISITOR CENTER INFORMATION PAVILION

-- Information counter construction and building changes	\$ 3,500.00	
-- Orientation exhibit panels	<u>5,200.00</u>	
		\$ 8,700.00





VISITOR CENTER INTERPRETIVE EXHIBIT AREA

-- Building modifications, including lighting	\$ 2,000.00	
-- Production and installation of exhibits, audio-visual presentation area, equipment	<u>18,500.00</u>	\$20,500.00

CAVERN TRAIL INTERPRETIVE SIGNS

-- Approximately 7 signs, 12"x16", Permaloy, w/posts, @ \$110.00	\$ 780.00	
-- Preparation of illustrations, typesetting, camera-ready art, 7 signs @ \$115.00	<u>805.00</u>	\$ 1,585.00

CAVERN ENTRANCE EXHIBITS

-- Tour time display, safety exhibit, spatial model display	<u>\$ 3,000.00</u>	\$ 3,000.00
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CAVERN TOUR

-- No additional interpretive media	-0-	
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THE VISTA POINT

-- Two overlook exhibits, 18"x30", Permaloy, with mounting brackets @ \$260.00	\$ 520.00	
-- Preparation of illustrations, typesetting, camera-ready art, two signs @ \$235.00	<u>470.00</u>	\$ 990.00

THE NATURE TRAIL

-- Approximately 20 signs, 7"x10", Permaloy, with posts, @ \$65.00	\$ 1,300.00	
-- Preparation of illustrations, typesetting, camera-ready art, 20 signs @ \$60.00	<u>1,200.00</u>	
-- Trail construction	<u>?</u>	
		<u>\$ 2,500.00</u>
		<u>\$46,475.00</u>







